

IN THE CLAIMS:

Please amend Claims 1-52 as follows:

1. (Currently Amended) A method ~~Method~~ of sending a digital signal, ~~including comprising the steps of: according to which: -~~ a watermarking operation is performed, consisting of

inserting a watermark, which is known to a receiving end, in the digital signal, so as to obtain a watermarked digital ~~signal; signal; -~~ an encoding operation is performed, consisting of

encoding the watermarked digital signal by means of an encoder, so as to obtain an encoded watermarked signal which can be decoded by means of a parametrizable iterative decoder; and ~~decoder; and -~~ a sending operation is performed, consisting of

sending ~~said~~ the encoded, watermarked signal, wherein the sent, encoded watermarked signal is processable by the receiving end to obtain the watermark, to compare the obtained watermark to a known watermark, and to modify ~~signal; whereby in the receiving end;~~ at least one parameter of the decoder ~~can be modified~~ according to ~~the~~ a result of the comparison between ~~a~~ the watermark obtained from the sent, encoded watermarked signal and the known watermark.

2. (Currently Amended) A sending ~~Sending~~ method according to Claim 1, wherein said encoding step encodes the watermarked digital signal using ~~the encoder is a turbo-encoder.~~

3. (Currently Amended) A sending ~~Sending~~ method according to Claim 1, further comprising the step of ~~wherein a modulation operation is also performed, consisting of~~ modulating the encoded watermarked signal before the performing said sending step operation.

4. (Currently Amended) A sending ~~Sending~~ method according to Claim 3, wherein said modulating the modulation step operation modulates ~~consists of modulating~~ the encoded watermarked signal by means of a modulation of the QPSK type.

5. (Currently Amended) A sending ~~Sending~~ method according to Claim 3, wherein said modulating the modulation step operation consists of modulating ~~modulates~~ the encoded watermarked signal by means of a modulation of the OFDM type.

6. (Currently Amended) A sending ~~Sending~~ method according to Claim 1, wherein said the watermarking watermark insertion step operation uses a technique of the fragile or semi-fragile type.

7. (Currently Amended) A sending ~~Sending~~ method according to Claim 1, wherein said watermark insertion step is performed on a digital signal comprising ~~is~~ an image signal.

8. (Currently Amended) A device ~~Device~~ for sending a digital signal, comprising
having: ~~watermarking means, for~~
watermarking means for inserting a watermark, which is known to a receiving end, in the
digital signal, said watermarking means outputting a watermarked digital signal; ~~signal~~;
~~encoding means, for~~
encoding means for encoding the watermarked digital signal by means of an encoder, said
encoding means outputting an encoded watermarked signal decodable ~~which can be decoded~~ by
means of a parameterisable iterative decoder; ~~and decoder~~; and
~~sending means, for~~
sending means for sending said encoded watermarked signal, wherein the sent, encoded
watermarked signal is processable by the receiving end to obtain the watermark, to compare the
obtained watermark to a known watermark, and to modify ~~signal, whereby in the receiving end~~;
at least one parameter of the decoder ~~can be modified~~ according to the result of the comparison
between a the watermark obtained from the sent, encoded watermarked signal and the known
watermark.

9. (Currently Amended) A sending ~~Sending~~ device according to Claim 8, ~~the preceding~~
~~claim~~; wherein ~~the~~ said encoder is a turbo-encoder.

10. (Currently Amended) A sending ~~Sending~~ device according to Claim 8, further comprising ~~wherein also having~~ modulation means for modulating the encoded watermarked signal.

11. (Currently Amended) A sending ~~Sending~~ device according to Claim 10, wherein said ~~the~~ modulation means modulates ~~modulate~~ the encoded watermarked signal by means of a modulation of the QPSK type.

12. (Currently Amended) A sending ~~Sending~~ device according to Claim 10, wherein ~~the~~ said modulation means modulates ~~modulate~~ the encoded watermarked signal by means of a modulation of the OFDM type.

13. (Currently Amended) A sending ~~Sending~~ device according to Claim 8, wherein ~~the~~ said watermarking means use a technique of the fragile or semi-fragile type.

14. (Currently Amended) A sending ~~Sending~~ device according to Claim 8, wherein ~~said~~ the digital signal is an image signal.

15. (Currently Amended) A method ~~Method~~ of decoding a received digital signal, ~~said~~ the digital signal having been watermarked with a known watermark, ~~including~~ comprising the

steps of: according to which: ~~-----~~ a decoding operation is performed, consisting of

decoding at least part of the received digital signal by means of a parameterisable iterative decoder; ~~decoder~~; ~~-----~~ a watermark extraction operation is performed, consisting of

extracting the watermark from the decoded signal; ~~signal~~; ~~-----~~ a comparison operation is performed, consisting of

comparing the extracted watermark with ~~the~~ a known watermark; ~~and watermark~~; and ~~a~~ modification operation is performed, consisting of

modifying, if necessary, at least one parameter of the decoder ~~decoding~~ according to the result of the comparison in said comparing step.

16. (Currently Amended) A decoding ~~Decoding~~ method according to Claim 15, wherein said decoding step comprises the step of performing a number of decoding iterations on at least part of the received digital signal, and

wherein ~~the~~ said modifying modification step operation comprises the steps of: includes: ~~-----~~ an operation of

calculating the number of decoding iterations ~~to be applied to the decoding~~, consisting of ~~by~~ determining a the number of decoding iterations to be applied as a parameter of the decoding operation, according to the result of the comparison; ~~and comparison~~; and ~~-----~~ an operation of adjustment of

~~adjusting the decoding operation performed by said decoding step by decoding,~~
~~consisting of applying to at least part of the received digital data during decoding the number of~~
~~iterations previously determined decoding iterations.~~

17. (Currently Amended) A decoding ~~Decoding~~ method according to Claim 15,
wherein said decoding step performs ~~the decoding operation is~~ a partial decoding
~~operation by operation, consisting of~~ decoding the received digital data by means of an iterative
decoder, and applying a decoding ~~an~~ iteration or a decoding half-iteration, so as to obtain a
partially decoded watermarked digital signal, and

wherein ~~the~~ said modifying modification operation step comprises the steps of: ~~includes:~~

~~=a~~

performing a quality testing operation by ~~operation, consisting of~~ testing whether
the quality of the extracted watermark is satisfactory; ~~and satisfactory; and-~~
~~as long as the quality is not satisfactory, an~~

performing an additional decoding iteration or half-iteration when the quality
testing is not satisfactory in the decoding, so as to finally obtain the optimum number of
decoding iterations or half-iterations to be applied as a parameter of the decoding operation
decoding.

18. (Currently Amended) A decoding ~~Decoding~~ method according to Claim 15, wherein
said decoding step is performed by an ~~the~~ iterative decoder comprising is a turbodecoder.

19. (Currently Amended) A decoding ~~Decoding~~ method according to Claim 15, wherein the received digital signal is an image signal.

20. (Currently Amended) A method ~~Method of receiving a digital signal, including steps according to which:~~ - - - - - a comprising the steps of:

~~receiving operation is performed, consisting of receiving modulated~~ encoded symbols ~~containing a watermark;~~ - - - - - a demodulation operation is performed, ~~consisting of~~

~~demodulating the received modulated~~ encoded symbols, so as to obtain demodulated ~~encoded data; and data; and~~ - - - - - a decoding operation is performed, consisting of

~~decoding the demodulated~~ encoded data using a decoding method according to Claim 15.

21. (Currently Amended) A Receiving method according to Claim 20, wherein said the ~~demodulation~~ demodulating step operation comprises the step ~~consists of~~ applying a demodulation corresponding to a modulation of the QPSK type.

22. (Currently Amended) A Receiving method according to Claim 20, wherein said ~~demodulating the demodulation step comprises the step~~ operation consists of applying a demodulation corresponding to a modulation of the OFDM type.

23. (Currently Amended) A device ~~Device~~ for decoding a received digital signal, ~~said the~~
digital signal having been watermarked with a known watermark, comprising: having:-
~~— decoding means, for~~
decoding means for decoding at least part of the digital signal by means of a
parameterisable iterative decoder; decoder; ~~- watermark extraction means, for~~
watermark extracting means for extracting the watermark from the decoded signal; signal;
~~- comparison means, for~~
comparing means for comparing the extracted watermark with the known watermark; and
watermark; and ~~-~~ ~~modification means, for~~
modifying means for modifying, if necessary, at least one parameter of the decoding
means according to the result of the comparison performed by said comparing means.

24. (Currently Amended) A decoding ~~Decoding~~ device according to Claim 23,
wherein said decoding means performs a number of decoding iterations on at least part of
the received digital signal,
wherein said modifying the modification means comprises: include:-
~~— means of~~ calculating means for calculating the
number of decoding iterations to be performed by said decoding means, in order to determine a
the number of decoding iterations to be applied as a parameter of the said decoding means,
according to the result of the comparison by said comparing means; and ~~;- and-~~
~~— means of~~

adjusting means for adjusting the decoding operations of said decoding means, in order to apply, during the decoding by the decoding means, the number of iterations previously determined decoding iterations.

25. (Currently Amended) A decoding ~~Decoding~~ device according to Claim 23, wherein ~~the~~ said decoding means comprises ~~are~~ partial decoding means ~~for means, for~~ decoding the received digital data by means of an iterative decoder, by applying a decoding ~~an~~ iteration or a decoding half-iteration, ~~the~~ said partial decoding means outputting a partially decoded watermarked digital signal; and

wherein ~~the~~ said modifying modification means comprises quality ~~include: - quality~~ testing means ~~for means, for~~ testing whether the quality of the extracted watermark is satisfactory, ~~satisfactory~~;

said partial decoding means effecting, as long as the quality is not satisfactory, an additional decoding iteration or half-iteration ~~in the decoding~~, so as to supply by ~~in the end of the~~ decoding operation performed by said decoding means on the digital signal the optimum number of decoding iterations or half-iterations to be applied as a parameter of the decoding means.

26. (Currently Amended) A decoding ~~Decoding~~ device according to Claim 23, wherein ~~the~~ said iterative decoder is a turbodecoder.

27. (Currently Amended) A decoding ~~Decoding~~ device according to Claim 23, wherein the received digital signal is an image signal.

28. (Currently Amended) A device comprising: ~~Device for receiving a digital signal,~~
having: ~~- receiving means, for~~
receiving means for receiving modulated encoded, symbols containing a watermark;
~~symbols; - demodulation means, for~~
demodulating means for demodulating the received modulated encoded symbols received;
~~the demodulation means and outputting demodulated encoded data; and data; and -~~
~~decoding means, for~~
decoding means for decoding the demodulated data by means of a decoding device
according to Claim 23.

29. (Currently Amended) A receiving ~~Receiving~~ device according to Claim 28, wherein the said demodulating ~~demodulation~~ means applies ~~apply~~ a demodulation corresponding to a modulation of the QPSK type.

30. (Currently Amended) A receiving ~~Receiving~~ device according to Claim 28, wherein the said demodulating ~~demodulation~~ means applies ~~apply~~ a demodulation corresponding to a modulation of the OFDM type.

31. (Currently Amended) A digital ~~Digital~~ signal processing apparatus comprising:
means for processing a digital signal; and
means for implementing apparatus, ~~having means adapted to implement a sending~~
method for sending the processed digital signal according to Claim 1.

32. (Currently Amended) A digital ~~Digital~~ signal processing apparatus comprising:
~~apparatus, having~~
means for decoding a received digital signal according to the ~~adapted to implement a~~
decoding method ~~according to~~ of Claim 15; and
means for processing the received, decoded digital signal.

33. (Currently Amended) A digital ~~Digital~~ signal processing apparatus comprising
~~apparatus, having~~ a sending device according to Claim 8.

34. (Currently Amended) A digital ~~Digital~~ signal processing apparatus comprising
~~apparatus, having~~ a decoding device according to Claim 23.

35. (Currently Amended) A telecommunications network comprising:
a base station; and
at least one peripheral station configured to communicate with said base station, wherein
said at least one peripheral station comprises a sending device configured ~~Telecommunications~~
~~network, having means adapted to implement a sending method according to Claim 1.~~

36. (Currently Amended) A telecommunications network comprising:
a base station; and
at least one peripheral station configured to communicate with said base station, wherein
said at least one peripheral station comprises a receiving device configured ~~Telecommunications~~
~~network, having means adapted to implement a receiving method according to Claim 20.~~

37. (Currently Amended) A telecommunications network comprising
~~Telecommunications network, having a sending device according to Claim 8.~~

38. (Currently Amended) A telecommunications network comprising
~~Telecommunications network, having an information a receiving device according to Claim 28.~~

39. (Currently Amended) A mobile ~~Mobile~~ station in a telecommunications network comprising:
a source of data representable by a digital signal; and
means for sending a digital signal representing the data ~~network, having means adapted~~
~~to implement a~~ according to the sending method ~~according to~~ of Claim 1.

40. (Currently Amended) A mobile ~~Mobile~~ station in a telecommunications network comprising:
a module configured to receive electromagnetic signals; and ~~network, having means~~
~~adapted to implement~~
a device receiving the electromagnetic signals from said module and configured to
perform the a receiving method according to Claim 20 on the electromagnetic signals received
from said module.

41. (Currently Amended) A mobile ~~Mobile~~ station in a telecommunications network comprising ~~Mobile station in a telecommunications network, having~~ a sending device according to Claim 8.

42. (Currently Amended) A mobile ~~Mobile~~ station in a telecommunications network, comprising ~~having~~ a receiving device according to Claim 28.

43. (Currently Amended) A base ~~Base~~ station in a telecommunications network comprising a sending device configured ~~network~~, ~~having means adapted~~ to implement a sending method according to Claim 1.

44. (Currently Amended) A base ~~Base~~ station in a telecommunications network comprising a receiving device configured ~~network~~, ~~having means adapted~~ to implement a receiving method according to Claim 20.

45. (Currently Amended) A base ~~Base~~ station in a telecommunications network comprising ~~network~~, having a sending device according to Claim 8.

46. (Currently Amended) A base ~~Base~~ station in a telecommunications network comprising ~~network~~, having a receiving device according to Claim 28.

47. (Currently Amended) An information storage medium ~~which can be read~~ readable by a computer or a microprocessor, and storing instructions of a computer program for instructing ~~the computer or microprocessor to implement~~ program, making it possible to implement a sending method according to Claim 1.

48. (Currently Amended) An information storage medium according to Claim 47, wherein said information storage medium it is ~~removable~~, partially or totally removable from a device in which said information storage medium is stored for reading by the computer or the microprocessor.

49. (Currently Amended) An information storage medium ~~which can be read~~ readable by a computer or a microprocessor, and storing instructions of a computer program for instructing the computer or microprocessor to implement ~~program, making it possible to implement~~ a decoding method according to Claim 15.

50. (Currently Amended) An information storage medium according to Claim 49, wherein said information storage medium it is ~~removable~~, partially or totally removable from a device in which said information storage medium is stored for reading by the computer or the microprocessor.

51. (Currently Amended) A computer program embodied in a computer readable medium for instructing a computer to perform ~~performing product containing~~ sequences of instructions for implementing a sending method according to Claim 1.

52. (Currently Amended) A computer program embodied in a computer readable medium for instructing a computer to perform ~~product containing~~ sequences of instructions for implementing a decoding method according to Claim 15.